

*claim:*

22. A method of distributing satellite signals received by a satellite antenna via a coaxial cable to a satellite receiver coupled to an end of said coaxial cable, said coaxial cable also having a further end, said method comprising:

5 receiving, with a satellite antenna, first signals having a first polarization and second signals having a second polarization;

frequency converting at least said first received signals to a different frequency band;

10 simultaneously applying said frequency-converted first signals and said second signals to the coaxial cable;

simultaneously communicating said frequency-converted first signals and said second signals through the cable;

recovering the frequency-converted first signals and the second signals from the cable;

15 further frequency converting said recovered first signals to a frequency range the satellite receiver can receive; and

switching, under control of said satellite receiver, between said further frequency-converted first signals and said second signals for application to said satellite receiver.

20 23. The method of claim 22 wherein said switching step comprising operating an electrical switch.

24. A method of distributing broadcast signals received from an artificial satellite comprising:

receiving first polarized signals and second polarized signals from the artificial satellite;

25 frequency converting at least one of said first signals and said second signals to different frequencies;

after processing by the frequency converting step, applying said first and second signals, to a coaxial cable such that the same coaxial cable carries both said first signals and said second signals simultaneously;

30 recovering said first signals and said second signals from the coaxial cable;

and

selecting between said first signals and said second signals for application to a satellite receiver.

25. The method as in claim 24 wherein said selecting step comprises electrically switching between said first signals and said second signals for application to said satellite receiver.

26. The method of claim 24 wherein said satellite receiver alternately uses first polarity type signals or second polarity type signals at a time, and said selecting step selects only first polarity type signals or second polarity type signals at a time for application to said satellite receiver.

10 27. The method of claim 24 wherein said satellite receiver is coupled via a wire to an input source, and said selecting step selects between said first signals and said second signals for application to said wire.

28. The method of claim 24 wherein said frequency converting step comprises a down conversion.

15 29. The method of claim 24 wherein the frequency converting step comprises an up conversion.

30. The method of claim 24 wherein the frequency converting step comprises a down conversion followed by an up conversion.

31. The method of claim 24 further including providing further frequency 20 converting said at least one of said first signals and second signals for application to said satellite receiver.

32. A satellite broadcasting system comprising:

a satellite dish;

a low-noise block converter coupled to the satellite dish;

25 a head-in processor that receives, from the low-noise block converter, both vertical polarization type satellite signals and horizontal polarization type satellite signals and applies both said vertical polarization type satellite signals and said horizontal polarization type satellite signals simultaneously to the same distribution cable; and

30 a head-out processor adapted for, in use, being coupled to a satellite receiver of the type that alternately receives vertical polarization type satellite signals and horizontal polarization type satellite signals, said head-out processor being coupled to said distribution cable, said head-out processor selecting

between said vertical polarization type ~~satellite signals~~ and said horizontal polarization type ~~satellite signals~~ being carried by said distribution cable for application to said satellite receiver.